

RURAL DISTRICT COUNCIL OF
UPTON-ON-SEVERN

REPORT

OF

Medical Officer of Health

AND

Sanitary Inspector

for the Year ended

31st December, 1946

A. F. TURNER, M.B., B.Ch., D.P.H.,

Medical Officer of Health.

H. E. FIRTH, Cert. R.S.I.,

Chief Sanitary Inspector

RURAL DISTRICT COUNCIL OF UPTON-ON-SEVERN

Report for the Year 1946

To:—

The Chairman and Members of the District Council.

SIR, LADIES AND GENTLEMEN,

I have the honour to present my report on the health of the district for the year 1946.

I took up the duties of Medical Officer of Health on the 1st September, 1946, on the retirement of Major M. J. Quirke, I.M.S., the appointment then becoming the full time one of Assistant County Medical Officer and Medical Officer of Health for the Malvern Urban and Upton-on-Severn Rural Districts. The task of serving three different local authorities is not an easy one, and it is often difficult to decide how to allot my programme of work to the best advantage. I must say that things have been made particularly easy in Upton by the efficiency of Mr. Firth, Surveyor and Sanitary Inspector, and Mr. Cromwell, Sanitary Inspector. In spite of the fact that the Surveyor's work has increased, Miss Attwood, our only clerk, and Mr. Cromwell have maintained the records well and the routine sanitary inspections have gone on steadily even if the ground has not fully been covered.

The vital statistics for the district show that the birth and death rates were satisfactory, the birth rate being 17·4 per 1,000 population, compared with 19·1 for England and Wales as a whole. The General physical condition of the population is, however, not so satisfactory and my impression is that the rural school children are not keeping pace in growth and physical endurance with the town children. The lack of canteen and restaurant facilities and, in some areas, school meals, means that the total diet is smaller for the country family even taking into account the extra cheese ration. In two rural schools where meals are not served only 6% of fathers got a canteen

meal. In Malvern Link the corresponding figure was 33% among children who all get school meals. In addition, the Ministry of Food figures show that the vitamin products are not taken up as they should be. Only 22% of the orange juice, 18% of the Cod Liver Oil, and 25% of the vitamin tablets are collected from the food office and distribution centres, although some people do draw their supplies from Worcester and Malvern, which lowers the percentages somewhat. Nevertheless, these figures leave a lot to be desired.

In conclusion, I think it should be stressed that more attention should be paid to the education, health and living conditions of the agricultural worker and his family. His work is often as energetic as the coal miner and is every bit as essential to the country.

I am, your obedient Servant,

(Signed) A. F. TURNER,
District Medical Officer.

Section A. Statistical and Social Conditions in the Area.

Area of the Upton-on-Severn Rural District—50,947 acres.

Registrar-General's estimate of the resident population:
12,870.

Number of inhabited houses according to the rate books:
3,810.

Rateable value: £58,662. Penny rate: £240 os. od.

BIRTHS

		<i>Live Births</i>		<i>Still Births</i>	
		<i>Legitimate</i>	<i>Illegitimate</i>	<i>Legitimate</i>	<i>Illegitimate</i>
Males	...	111	8	5	0
Females	...	98	7	3	0
Total	...	<hr/> 224 <hr/>		<hr/> 8 <hr/>	

Birth rate per 1,000 of the estimated resident population:
17·4.

The corresponding figure for England and Wales as a whole: 19·1.

The Still birth rate per 1,000 live and still births: 34·5.

DEATHS

Attributable deaths:							
Males	...	...	...	...	...	...	71
Females	...	...	...	...	...	...	81
Total	...	...	...	...	...	...	152
Rate per 1,000 estimated population						...	11·8
Deaths from puerperal sepsis				...	...	...	0
Deaths from other puerperal causes				...	...	...	0
Infantile mortality				...	...	...	9
Rate per 1,000 live births						...	40·2
Deaths from cancer				...	...	...	31
Males	...	...	...	...	...	...	13
Females	...	...	...	...	...	...	18
Deaths from measles				...	...	...	0
Deaths from Whooping cough				...	...	...	0
Deaths from diarrhoea				...	...	...	0
Deaths from diarrhoea (in children under 2 yrs. of age only)							0

Comments on the Vital Statistics.

(i) The birth rate of 17·4 per 1,000 population is below the England and Wales figure of 19·1 and shows a slight fall from the 1944 war-time peak of 18·2. The death rate of 11·8 per 1,000 is normal for the district and varies little from year to year.

(ii) The Infant Mortality figure has risen from the very satisfactory one of 26·32 per 1,000 in 1945 to 40·2 per 1,000. There were nine deaths of children under one year and five of these were premature with birth weights of 2, 3, 3, 3½ and 5½ lbs. respectively. Four of these premature deaths must be considered unavoidable (in the absence of special facilities for premature babies). Of the four normal infants two died of

atelectasis (failure of the lung to expand) aged 3 and 9 days respectively, one of pneumonia aged 2 months and one of marasmus (wasting) aged one month. The satisfactory figures for Infantile Mortality, Maternal Mortality and Puerperal Pyrexia show what can be done by doctors and district nurses even when working under adverse conditions in the patients' own homes. It is considered that a reduction of the Infantile Mortality rate could be effected by sending the district nurses on more refresher courses. These intelligent women should not be allowed to go stale in remote country parishes but should have frequent refresher courses at large hospitals and teaching centres to keep them up to date.

(iii) There were 31 deaths from cancer, 13 males and 18 females. The rate per 1,000 population is 2.4 which is a rather high figure. There was no abnormal variation from the country as a whole in sex incidence or in the incidence of the various organs attacked by the disease.

Section B. Public Health Officers of the Authority.

TURNER, A. F.	Medical Officer of Health.
FIRTH, H. E.	Surveyor and Sanitary Inspector.
CROMWELL, E. J.	Sanitary Inspector.

Laboratory facilities. The County Laboratory carries out all laboratory work required by the District Council and as the distance and communications with Worcester are good there are no difficulties.

Ambulance facilities. Are working smoothly and no change has taken place since last year.

Home Nursing is afforded by the District Nursing Associations.

Treatment Centres and Clinics are under the County Council.

Tuberculosis and Venereal Diseases Clinics are centrally located in Worcester.

Infant Welfare Clinics are held at Upton-on-Severn, Kempsey, Hanley Swan and Welland.

Hospitals. There are no hospitals in the District, and Worcester, Cheltenham and Malvern Hospitals are used for acute cases requiring hospital treatment. There is no maternity

home and mothers have to go to Evesham, Malvern, or further afield if they do not want to be confined in their own houses. As the number of beds is decreasing in Malvern's private maternity homes, conditions are becoming more difficult. Having given this matter careful thought, I think that a 25-bed maternity home in Malvern might be a reasonable proposition, and would suit many more families in the Upton district than the present arrangements.

Section C. Sanitary Circumstances of the Area.

I am going to confine my remarks briefly to housing and water supplies.

(a) The housing programme has gone on steadily, 10 houses were completed in 1946 and contracts let for 52. There are 435 applications for council houses and of these 65 are from people outside the district. At the present rate of building, and, disregarding the outside applications, it will take about 4 years to meet the demand. This is a satisfactory figure compared with many other local Authorities.

There are applications from 72 agricultural workers which include market gardeners and tractor drivers. This is just over 16% of the total. I think a grant similar to that given under the Rural Workers Act might help agricultural workers as there are a number of houses which could be renovated for them and council houses are not always convenient for men who want to live more or less on the job.

The application forms themselves give a lot of interesting information and I think that they should be fully analysed before any further housing sites are decided upon. At present the distribution of houses is in accordance with the immediate needs of the separate parishes. In 10 years' time when the Urban areas have completed their programmes it may be difficult to find occupants for some of the rural council houses we have built.

The site layout of the new council houses still leave a lot to be desired. It seems a pity to build houses looking across a road into a bank when they could be turned round to look S.E. across the open country. The houses now going up will be here for 75 years, and although time is urgent, much fuller consideration should be given to selections and layout of the sites.

At present the deciding factors appear to be the shortest possible roadwork and drainage required to link up the various houses.

The construction of the individual houses is good when allowance is made for the wood shortage, but it is rather disappointing to see that old-time plumbing methods are still persisted in. This leads to a loss of skilled labour and material every winter. It cost £14 10s. od. to repair frost damage in 10 new council houses after one frost. I think the architects should follow more closely the Ministry of Health directives on this matter. Wooden houses in Canada and Sweden do not suffer frost damage, where the temperatures are very much lower. In the meantime a start could be made locally by bringing in the rising main up an inside wall. (This is now being done in this area.)

Water Supplies.

Apart from Upton-on-Severn itself and a part of Powick and Newland, surface wells, subject to pollution and occasionally to water shortage, supply the district. The Council have given a considerable amount of thought to the problem of supplying the whole area with main water. Various sources of supply have been considered and the three most likely ones are, Malvern, Coventry and Cheltenham. The Malvern supply comes from deep borings at Bromsberrow and it cannot be unlimited as the sandstone outcrop is only $6 \times 2\frac{1}{2}$ miles in extent, and the yield is dependent on the rainfall in that area.

The Coventry and Cheltenham supplies are taken from the Severn and there are technical difficulties in using the water so near its source in the case of the Coventry water, and the Cheltenham supply at Tewkesbury is not conveniently placed and will require a lot of expensive piping.

The Upton bore 1,700 feet deep, which is almost artesian, supplies 30,000 gallons a day at present through a 3 inch bore. The experts say it is not a reasonable proposition to put down a larger bore and pump more water.

A scheme to supply Hanley Swan, Hanley Castle and Severn Stoke with water from Malvern has now been authorised and the contract has been let. This can be linked up with the main scheme at a later date.

Section F.

INFECTIOUS DISEASE, 1946

Disease	All ages	Under 1 yr.	1-2 yrs.	2-3 yrs.	3-4 yrs.	4-5 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-34 yrs.	35-44 yrs.	45-64 yrs.	65 ×	No age specified
Smallpox ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever ...	11	-	-	1	-	1	7	1	-	1	-	-	-	-
Diphtheria ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enteric Fever ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerperal Fever ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerperal Pyrexia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pneumonia ...	13	-	-	1	-	-	-	-	1	3	1	4	3	-
Erysipelas ...	4	-	-	-	-	-	-	-	-	-	-	1	2	1
Acute Poliomyelitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles ...	45	1	4	4	2	2	27	4	-	-	1	-	-	-
Whooping Cough	12	2	1	2	1	3	2	1	-	-	-	-	-	-
Cerebral Spinal Fever	3	-	-	-	-	-	-	-	-	1	2	-	-	-
Malaria ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dysentery ...	3	-	-	-	-	-	-	-	-	-	-	1	2	-

The table of infectious diseases shows that there were no serious epidemics during the year. There were only eleven cases of scarlet fever and no cases of diphtheria. These two diseases were formally nursed at the District Isolation Hospital and the great economy effected by closing it down must now be apparent. The cases are sent to Worcester Isolation Hospital and there have been no difficulties or complaints about this new arrangement, which is working smoothly.

It is good to see that there were no cases of diphtheria, for the second year running. It must be admitted, however, that only 52% of the children under 5 years of age have been immunised and therefore the absence of diphtheria can no more be attributed to immunisation than the absence of typhoid fever can be attributed to the excellence of the water supplies! We had good luck in 1946 and 100% immunisation of children under 5 years must be the target for 1947.

Only 45 cases of measles and 12 of whooping cough were notified and it must be assumed that few parents call in the doctor for these illnesses. From the parochial view of a district Medical Officer, these figures can only be of limited epidemiological value as they bear little relation to the actual numbers of cases occurring. Although there were no deaths from either disease, there is no information available to show how many cases of lung, ear or other chronic complications resulted from them. The Ministry of Health propose to start a scheme to find out the causes of absenteeism in school children in this district, and some further light may be thrown on this subject.

Tuberculosis. At the end of 1946 there were 66 pulmonary tuberculosis cases and 21 non-pulmonary cases on the register. The pulmonary cases have been visited and as far as is known no infectious case is sharing a bedroom with another person. These cases are given priority in new houses whenever possible and a check is kept on them to see they are not employed in certain types of food handling. I understand the County Medical Officer will report on the success of the grant to those cases who may recover, and deal with the County as a whole.

SANITARY INSPECTOR'S REPORT

for the Year ending 1946

To:—

The Chairman and Members of the District Council.

SIR, LADIES AND GENTLEMEN,

Again I have the honour to present a report of the Sanitary Inspector's work during the year ending December, 1946.

Unfortunately during the year I lost the services of Mr. I. Hughes, my Assistant, who was called to His Majesty's Forces. This was indeed a handicap, for additional work is ever increasing in this department. As I hold the joint appointment as your Surveyor and Sanitary Inspector and the work in the former office has increased enormously, little of my time can be spared for work as a Sanitary Inspector, and most of the work appertaining to this office is carried out by my very able colleague, Mr. Cromwell.

Summary of Inspections.

Housing inspections	...	...	...	...	...	401
General Complaints	...	...	...	...	...	49
School inspections	...	...	...	...	...	7
Visits for water and milk sampling	...	...	...	...	...	53
Visits to food shops	...	...	...	...	...	31
Visits to bakehouses	...	...	...	...	...	25
Visits to cafes, kitchens and hotels	...	...	...	...	...	11
Cow shed inspections	...	...	...	...	...	90
Investigations infectious diseases	...	...	...	...	...	56
Inspections, tents, vans and sheds	...	...	...	...	...	6
Drainage inspections	...	...	...	...	...	131
Rats and mice destruction inspections	...	...	...	...	...	42
Verminous premises inspected	...	...	...	...	...	3
Inspections of meat transportation vans	...	...	...	...	...	6
Visits for meat inspections, private	...	...	...	...	...	1
Visits to hop pickers' dwellings	...	...	...	...	...	16
Repair licences inspections (Civil Building Control)	...	...	...	...	...	151
Miscellaneous and re-inspections	...	...	...	...	...	311

1,390

Infectious Diseases.

Visits to premises for investigation ...	...	...	56
Premises disinfected after notifiable disease	...	...	15
Premises disinfected after other diseases	...	...	3
Verminous premises disinfested	...	...	2
Cases of Scabies investigated	...	...	5
Cases of Scabies given hospital treatment	...	...	3

Diphtheria Immunisation Carried out during 1946.

Ages 1-5 years	Ages 5-14 years	Total for Year
145	24	169

Immunisation in relation to Child Population.

Number of Children who had completed a full course of Immunisation at any time up to 31st December, 1946.

Age at 31.12.46 i.e. Born in Year	Under 1 1946	1 1945	2 1944	3 1943	4 1942	5 to 9 1937-41	10-14 1932-36	Total under 15
Number Immunised ...	20	67	131	137	134	591	671	1351
Estimated mid-year population, 1946 ...	...	...	935	...	...	1670	...	2605

All cases of scarlet fever and the more serious infectious diseases are immediately investigated and advice given to contacts in order to retard further possible spread of the infection. A simple form of room disinfection by fumigation is carried out by the investigator. Arrangements have also been made for the Infectious Hospital receiving the cases to cart the bedding and carry out steam disinfection. The bedding is returned to the householder by the Council's vehicles. The arrangements for treating this areas' infectious cases at a central hospital has worked very smoothly. Private Practitioners usually telephone information to the office during working hours, or to either the Medical Officer of Health or myself after office hours.

The co-operation of the Worcester Isolation Hospital staff is most satisfactory.

Food Condemned and Unft for Human Habitation.

Eggs (mainly imported	...	...	...	1,549	
Bacon	...	...	...	7 $\frac{1}{2}$	lbs.
Oranges	...	...	...	1,074	„
Cheese	...	...	...	30 $\frac{1}{2}$	„
Flour	...	...	...	590	„
Liver	...	...	...	2	„
Margarine	...	...	...	84	„
Jam and Marmalade	...	...	...	10	„
Prunes	...	...	...	150	„
Dry Peaches	...	...	...	25	„
Luncheon Meat	...	...	...	5 $\frac{3}{4}$	„
Oats	...	...	...	26	„
Slab Cake	...	...	...	8	„
Ox and Lamb Tongues	...	...	...	22	„
Canned Milk, etc.	...	...	...	85	tins.
Wet Fish	...	...	...	36	stone.
Mixed Pickles	...	...	...	3	galls.
Chocolate and Fancy Cakes	...	...	...	360	
Swiss Rolls	...	...	...	210	

This rather high total of foods condemned as unfit, came mainly from two rather large N.A.A.F.I. canteens situated within the area. The foods condemned from the many local

food retailers was surprisingly small and mainly consists of tinned foods. Without exceptions, the local retailers take the greatest care to prevent any food of doubtful quality reaching the public.

Tinned foods formed the bulk of foods condemned at retailer shops and it is surprising to note that a large percentage of such articles of food condemned was milk canned in this country.

Rural Housing Survey 1946.

No. Houses inspected and recorded during 1946.	Classification *				Houses included in categories. 1-4 noted for action under the Rural Workers Act.
	1	2	3	4	
337	2	122	153	60	28

*(1) In all respects fit.

(2) Minor defects.

(3) Major defects.

(4) Unfit, and cannot be made fit at a reasonable expense

Unavoidably, the work in connection with the survey advised by the "Hobhouse Report" during the year of this report was retarded considerably. This was due to the loss of my assistant, Mr. Hughes, and to new and additional work undertaken by the department.

Under present conditions a date for the completion cannot be forecast.

To date, slightly over 900 houses have been inspected and this number recorded. Of this total 150 are classified under the category 4, giving a percentage of slightly over 16% of houses unfit for occupation. As houses which are obviously fit have not been included in the inspections, this figure of 16% if calculated on the total number of occupied houses would be much less.

Information obtained by this survey and through other personal investigations of new housing applications, presents a rather gloomy picture of the housing conditions prevailing.

Apart from the fact that many houses are much below a reasonable standard, the problem of overcrowding and the misery caused by unsuitable houses having to be used by numbers of more than one family, can only be truly understood by the unfortunate occupants.

Every effort is being made to relieve serious overcrowding by giving some priority for new houses, and by the requisitioning of vacant property, but both sources are very limited. The present rate of providing houses is much too slow. The very desirable houses now being erected of the 1,000 superficial feet area are taking over three times longer to build than the pre-war 760 superficial feet houses.

Water Supplies.

Water samples.

Number of samples submitted from private well supplies	...	...	...	...	...	...	31
Number of such samples unfit or quoted "suspicious"							21
Number of new wells sunk as result of informal action	...	...	...	...	...	...	1
Number of wells cleaned and repaired as result of informal action	...	...	...	...	...	...	10

Piped Supplies.

<i>Area Supplied.</i>	<i>Authority Supplying.</i>
Upton-on-Severn, most of the parish	District Council.
Powick, Mental Hospital and about 30 houses	Worcester City Corporation.
Newland, about half the parish	Malvern Urban Council. (Statutory Authority.)
Madresfield, most of the parish	(Private Supply) Area in Malvern Statutory Area.

The greater part of the district relies upon supplies from wells sunk to various depths through varying stratas, with clay or marl generally forming the impervious strata. No serious drought was reported from these sources during the year, due mainly to the little above normal rainfall during the year. Generally, through the gradual installation of more modern sanitary fitments in the shape of baths, water closets, etc., throughout rural areas, increased demand is placed on the well supplies, and it is probable that even with normal rainfall shortages will exist. The quality of well water, especially from the shallow older wells, is always doubtful, and generally the total hardness is high.

A piped supply for a greater part of the area is the Council's objective, and schemes are in course of consideration for this purpose.

The small portion of the comprehensive scheme supplying part of the central area is now in hand. The small Upton works continues to supply an increased number of consumers, but steps must be taken soon to make this supply more reliable, as a breakdown in machinery would be most costly, and cause very serious inconvenience to consumers.

Sample of Upton water.

(Sample of Reservoir water contained in W. Qt. bottle marked Reservoir, Upton Waterworks, on 26th June, 1946.)

Physical Characters	...	...	...	...	Clear
Odour	...	...	...	...	None
Deposit	...	...	...	...	None
pH	...	...	...	...	8.1

Chemical Examination. (Results expressed in parts per 100,000.)

Solids in Suspension (Dried at 100° C.)	...	None
„ Solution (Dried at 100° C.)	...	110
„ „ After Ignition	...	105
Chlorides Calculated as Common Salt	...	19
Hardness—Permanent	...	10
„ Temporary	...	9
„ Total	...	19

Free and Saline Ammonia	...	...	...	0.005
Albuminoid Ammonia	...	...	...	0.0008
Nitric Nitrogen (Nitrates)	...	...	...	None
Nitrous Nitrogen (Nitrites)	...	...	...	None
Oxygen Absorbed in 4 hours at 27° C.	...	...	...	None
Toxic Metals	...	...	...	None detected
Free chlorine on receipt	...	...	...	0.008

Bacteriological Examination.

Number of Colonies developing upon Agar.

(a) In two days at 27°	...	...	24 per one m.l.
(b) In three days at 22°	...	...	80 per one m.l.
Coli-Aerogenes (Presumptive Coli)			
count	...	...	3 per 100 m.l.
Streptococci	...	...	Absent

Opinion:—The sample is fit for drinking.

(Signed) R. NIND,
Deputy County Analyst.

5th July, 1946.

Sewerage.

Areas having Sewerage Schemes.

Upton-on-Severn, Kempsey, Hanley Swan, Hanley Castle, Callow End, Earls Croome, Powick.

Improvements on most of the disposal areas at the above works is necessary. Samples of the effluent from Upton, Hanley Swan, and Earls Croome, are occasionally taken, and are generally fairly satisfactory. The No. 1 contract for dealing mainly with sewage from the Mental Hospital, Powick, is now well in hand, and it is hoped the full scheme for centralizing the sewage disposal for the whole parish can soon be undertaken.

The treatment of sewage in scattered rural areas generally gives rise to legitimate complaints. Investigations satisfy one that improvements in the sewage arrangements in the following parishes must be given very serious consideration in the near future—Welland, Ripple, Severn Stoke, Madresfield and Newland.

Cowsheds and Dairies.

Number of Wholesale Producers	...	...	...	271
Number of Retail Producers	...	...	...	28
Number of Cowshed and Dairy Inspections	...	...	...	90
Number of Milk Samples taken	...	...	...	11

Analysis of Samples giving Colony Count of Bacteria per ml.

Up to 10,000 per ml.	...	...	...	...	0
10,000—20,000 per ml.	...	...	...	...	2
20,000—50,000 per. ml.	...	...	...	...	5
50,000—100,000 per ml.	...	...	...	...	1
Over 100,000 per ml.	...	...	...	...	3

Milk Special Designation Order.

Number of Licences Pasteurised Producers	...	...	...	...	1
Number of Licences Pasteurised Retailers (Supplementary Licences)	...	...	...	...	2
Number of Samples taken of Producer's Milk	...	...	...	...	4

Copy of Recent Producer's Sample.

(Sample taken from Hanley Castle Elementary School supplied by the Worcester Co-operative Society.

Type of Milk—Pasteurised.

Methylene Blue:—

Not decolourised in $\frac{1}{2}$ hour

Decolourised —

Phosphatase Test:—

*Group No. 1

Lovibond Blue Units 1.9

Fat 3.9%

Solids not fat 8.9%

*Group No. 1—2.3 Lovibond Blue Units or less—a negative Phosphatase test. This milk is sufficiently heat treated.

Miscellaneous.

Number of Bakehouses in area	...	...	...	...	8
Bakehouse inspections	...	...	...	...	25
Informal notices served:—					
Cleanliness	...	...	...	...	2
Sanitary accommodation	...	...	...	...	1

Rodent Control.

Mr. W. H. Beamand was appointed Rodent Officer and commenced duty on the 23rd July, 1946, in succession to Mr. Gould. This is a joint appointment with Evesham Borough and Pershore Rural District, one week in four being spent in Upton-on-Severn.

The Council adopted the Scheme N.S. 12 put forward by the Ministry of Food, for the systematic survey and treatment of the area. Under this scheme the Ministry have agreed to pay the whole of the cost of the survey and also contribute 60% of the cost of treatment.

The work of surveying was commenced towards the latter end of 1946.

The Council also adopted the Ministry's Scheme, N.S. 13, for the systematic treatment for rats in sewers, and one treatment of the Upton Town sewers has been carried out with practically negative results, proving the system is moderately free from infestation.

The refuse tips have been systematically treated and the rat populations, although not completely obliterated, have been considerably reduced.

Treatment.

This consists of baiting with damp sausage rusk for three days and adding poison on the fourth. Any bodies found the following days are buried.

Poisons Used: Zinc Phosphides; Arsenious Oxide; Cymag.

Shops Acts.

Number of inspections made	...	...	...	14
Action necessary	...	...	...	Nil

Refuse Collection.

Area served	...	...	...	Whole area, about 85% of properties.
Service	...	...	...	Fortnightly to most areas
Disposal	...	...	...	To three tips.
Approximate amount of refuse	1,100 tons per year.			

I am, your Obedient Servant,

(Signed) H. E. FIRTH,

Chief Sanitary Inspector.

